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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/030,134	01/25/2002	Satoshi Tazaki	020085	8160

23850 7590 09/24/2004

ARMSTRONG, KRATZ, QUINTOS, HANSON & BROOKS, LLP
1725 K STREET, NW
SUITE 1000
WASHINGTON, DC 20006

EXAMINER

DICUS, TAMRA

ART UNIT	PAPER NUMBER
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1774

DATE MAILED: 09/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

S.e.

Office Action Summary	Application No. 10/030,134	Applicant(s) TAZAKI, SATOSHI	
	Examiner Tamra L. Dicus	Art Unit 1774	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 June 2004.
 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 1-12 is/are rejected.
 7) ☐ Claim(s) _____ is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The prior Office Action is withdrawn due to Applicant's arguments.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-12 are rejected under 35 U.S.C. 103(a) as obvious over USPN 5,516,456 to Shinohara et al. in view of USPN 5,360,688 to Von Trebra et al.

Shinohara teaches a molded article formed of an alicyclic structure-containing polymer such as dicyclopentadiene and norbornene (col. 3-col. 4) (instant claims 9-11) used in light guides for back lights in liquid crystal displays (instant claim 7). The molded article may have one or two color layers formed thereon consisting of coloring pigment and dye compositions and the like (ink) printed in patterns of any shape or pattern such as squares, circular dots, stripes, and lines (encompasses ink layer provided after a pattern). See col. 11, lines 50-56 and col. 12, lines 1-39. Conventional color compositions are listed at col. 10, line 59 through col. 11, line 45 and can be printed using offset printing, screen printing or flexographic printing. At col. 12, lines 1-40, the ink functions as a light-shielding material by including inorganic or white pigments and metal oxides. Such ink is a functional equivalent of the "light-reflecting" property as expressed in instant claim 6. To instant claim 8, the term, "container" is broad enough to include a liquid crystal display as Shinohara teaches.

Shinohara discloses that conventional black inks are known to coat and print black stripes for forming patterns and that there are no limitations of coating color ink layers at col. 11, lines 50-57. Shinohara does not teach the black ink containing polymers such as acrylic. However, Von Trebra et al. teaches conventional black inks are mixed with acrylic polymers to any amount in order to provide the degree of opacity to molded composite films at col. 6, lines 25-40. The structure provided by the combination of prior art would produce the claimed invention. It would have been obvious to one of ordinary skill in the art to have modified the black ink of the molding of Shinohara to include an acrylic resin because Von Trebra teaches it is conventional to add acrylic resins to black ink and the amounts may be varied to provide the degree of opacity to composite thermoplastic films (col. 6, lines 25-40 and col. 5, lines 15-25).

The combination of Shinohara and Von Trebra does not disclose the retention selection subjected to tape peeling adhesion test having a value of at least 80% in instant claim 1 and index of wetting of at most 42 dyne/cm-instant claims 3 and 12. However, in view of the prior art above, such properties would be inherent as the same materials are used, absent any evidence of the contrary, or were within the purview of one having ordinary skill in the art given the same materials used. Further, it would have been obvious to one having ordinary skill in the art to modify the combination with routine optimization as it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272. The experimental modification of this prior art in order to ascertain optimum operating conditions fails to render Applicant's claims patentable in the absence of unexpected results. *In re Aller*, 105 USPQ 233.

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Shinohara does not teach an ink layer is at most 100 microns as instant claim 4.

However, it would have been obvious to one of ordinary skill in the art to produce a thickness of an ink layer that is at most 100 microns, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272.

Thickness effects the strength and overall opacity of the ink applied layer.

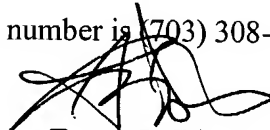
Conclusion

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

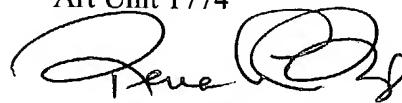
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamra L. Dicus whose telephone number is (703) 305-3809. The examiner can normally be reached on Monday-Friday, 7:00-4:30 p.m., alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on (703) 308-0449. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-8329 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



Tamra L. Dicus
Examiner
Art Unit 1774



RENA DYE
SUPERVISORY PATENT EXAMINER

September 21, 2004

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